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SIX-MONTH RESULTS FOR THE KELLY AIR FORCE BASE COMPRESSED WORK WEEK SURVEY

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This report has been reviewed and is approved for publication.

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		nch. (AL/CFTO), was	s requested by the San Antonio Air			
Logistics Center, Human Res	sources Center (SA-ALC/HR	C) at Kelly AFB, T)	(, in May 1991 to evaluate worker			
attitudes during a trial transition	on from an 8-hour per day, 5	-day work week to a	10-hour per day, 4-day work week.			
The trial period for this Con	npressed Work Schedule ((CWS) began Septer	nber-October of 1991. Results of			
The 6-month results were co	of the that period were repor liected between March and	ted by investigators t May 1992, and then	from AL/CFTO in AL-TR-1992-0034. e were 2,213 surveys collected, of			
which 2.058 were acceptable	for statistical analysis. Over	erall. 72% of the wo	rkers indicated a preference for the			
CWS and 6% had no prefere	nce. However, 22% of thos	e surveyed preferred	I their previous schedule of 8 hours			
per day during a 5-day work w	reek. The intent of this 6-mor	nth report, and the pr	evious 30-day and the 1-year report			
to follow, is to explore the so	cial impact of the CWS and	the demographic character to consider the consideration to the considera	aracteristics of those who preferred ed the CWS, certain characteristics,			
not necessarily inclusive, ema	raed for those who did not i	ity consistently lavor For example, certain	directorates, older employees (over			
10 years in service at Kelly A	FB), evening or night shift w	orkers, those with de	ependent adults at home, and those			
who use public transportation			t expressed less preference for the			
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SIX-MONTH RESULTS FOR THE KELLY AIR FORCE BASE COMPRESSED WORK WEEK SURVEY

INTRODUCTION

Compressed Work Schedules (CWS), as alternatives to the 8 hours per day, 5 days per week Standard Work Schedule (SWS), have been tried and found positively productive in various industrial corporations. Federal agencies were empowered to alter employee duty hours where expedient by the Federal Employees Flexible and Compressed Work Schedule Act of 1978. The Air Force Logistics Command (AFLC) in 1991 decided to evaluate CWS as an altered work schedule for its civilian work force. Accordingly, the San Antonio Air Logistics Center, Human Resources Center (SA-ALC/HRC) at Kelly Air Force Base (AFB), Texas, implemented an assessment of CWS on a representative number of its employees using the 10-hour per day, 4-day CWS before making the decision basewide.

The Armstrong Laboratory, Sustained Operations Branch (AL/CFTO) at Brooks AFB, Texas, was requested to help assess worker/supervisor attitudes to the new schedule, CWS. Subjective responses of employees involved in the prototype CWS were evaluated in the 30-day report (5), which was the first in a series of evaluations during the yearlong trial period. The 30-day report indicated 82% favored CWS or had no preference. This report covers the subjective responses of the same employees after having been on CWS for a 6-month period.

There are few published studies regarding the impact of CWS on the lifestyle or quality of life of the employee, particularly over an evaluation period of sufficient length to gauge attitude change during the adjustment period. This CWS assessment provided an opportunity to analyze CWS workers' attitudes at Kelly AFB over the duration of a yearlong trial period, an important and unique one in Federal work force practices (16). These results may be useful in guiding management's decision to implement, modify, or ignore any CWS basewide at Kelly AFB and/or at other Department of Defense (DOD) organizations.

In a previous study, 4-day CWS produced improvements in job satisfaction and morale, but only for employees who actively participated in leisure activities (10). The author recommended training employees in effectively using leisure time. In a report, using a 12-hour, 3-day CWS, the strongest preference was found for the new schedule among those who participated in the decision to implement it (13). Another study of a 3-day CWS found employees with experience on 12-hour shifts preferred it and felt that it provided less commuting costs with more useable time off (2). These findings correspond with other research (21) that indicated a greater percentage preferring CWS among employees with CWS experience than without it, perhaps indicating that attitudes change in the direction of favoring CWS over time.

Not all CWS studies reported employee or employer satisfaction. One review estimates that 28% of companies initiating CWS will return to the SWS (21). Another study showed where initial response to the 4-day work week indicated greater self actualization, less absenteeism, and better performance after 13 months but not at 25 months (12). Older workers and women with children seem to prefer CWS least. One of the objectives of this report was to identify characteristics of employees at Kelly AFB negatively impacted by CWS, thus providing management with guidance for making changes in alternative schedules or for applying special considerations to employees impaired by the CWS.

One of the most obvious concerns about the consequence of CWS on job satisfaction is the potential for cumulative fatigue. Also, the extent of fatigue generated by CWS can reduce the ability to effectively utilize off-duty time. Fatigue may have physical repercussions in addition to subjective consequences. One study found that the 4-day CWS significantly degraded physiological indexes of fatigue, strength, and alertness when the first day of the work week was compared to the last day of the work week (22). Likewise, a 4-day CWS produced measurable fatigue on cognitive, perceptual-motor, and subjective tasks for data entry personnel on the last day of the week compared to a SWS (18). Subjective reports of fatigue and difficulty arranging meetings with staff on other schedules are some typical complaints about CWS, although work productivity does not usually suffer (7). Others, particularly among groups experienced with long shifts like medical staff, report less fatigue and greater employee satisfaction with 4-day CWS (4,6,15), which helps management consider providing information to employees on the best means to effectively manage sleep and leisure time on a CWS.

METHODS

A survey similar to the 30-day model developed by AL/CFTO (5) was the main instrument for the 6-month evaluation of worker attitudes toward CWS, 10-hour per day, 4-day work week at Kelly AFB. The survey was patterned after comparable studies found in a literature review for monitoring job and personal satisfaction (3.7,8,11,17,18,21). AL/CFTO has a long history of measuring fatigue and mood in aircrew and applied this experience to the development of the survey, designed specifically for the unique conditions of the trial transition at Kelly AFB. A copy of the survey is included in Appendix A. Standard bubble sheets (AF Form 1200) were used to record the responses for subsequent processing on a Scantron 8200 Optical Mark Reader (9). Respondents completed the survey during duty time. Investigators were always on hand to answer questions and to ensure the integrity of the survey. SA-ALC/HRC arranged for well-lighted and quiet facilities for the completion of the survey. Effects of CWS on employee safety and productivity were to be assessed by SA-ALC and are not included in this report.

SA-ALC selected various organizations to start CWS in September 1991. The organization DS is the Directorate of Distribution, in which the

Transportation Division (DST) had three branches in CWS (Air Terminal Branch (DSTA), Packaging and Transportation Support Branch (DSTD), and Passenger & Household Goods Branch (DSTH)) that cover the terminal services and operations and AF packaging. LAB is the Aircraft Division that provides maintenance for C-5 and B-52 aircraft. LDA in the Directorate of Aerospace Equipment Management is the Automatic Test Systems Division surveyed in CWS. LDS is also in the Directorate of Aerospace Equipment Management and is the Software Division that covers software development for test standards and was studied in the CWS survey. For the 30-day results both LDA and LDS were grouped together as LD. TI is the Technology and Industrial Support Directorate, in which TIMPF, the Foundry and rubber shop, was surveyed in CWS survey.

A total of 2,213 workers completed the survey, representing about 90% of the Kelly AFB employees participating in the prototype CWS. Errors in completion of the standard bubble response form resulted in the exclusion of 127 surveys, leaving 2,058 surveys of civilians and 28 military for analysis. The most common errors were selection of unassigned response choices and misalignment of responses to survey items.

RESULTS

The main result of the 6-month survey concerns the response to the question, "Which work schedule do you prefer?" (question 119), in which 72% of the respondents indicated a preference for the CWS, 6% expressed no preference for either CWS or SWS, and 22% of the respondents selected the SWS. Thus, 78% either preferred CWS or were neutral, and 22% indicated negative concerns on CWS.

The results of the lifestyle and job impact portion of the survey (questions 1-91) generally support the main finding that the majority of the workers preferred CWS to their old schedule. These data indicated that lifestyle and job factors have generally improved or stayed the same under CWS as in Table 1. For example, the section in Table 1 concerning Job Related Factors revealed that 90% of respondents felt that under CWS job productivity had improved or stayed as it was. Alternatively, only 10% felt that productivity was down under CWS. This finding means that even among those who prefer SWS (22%), there were a substantial number that did not believe CWS had interfered with job output.

The responses to sections A, B, and C of the survey provided information concerning the impact of CWS transition on life-style and job satisfaction. These data comprise the results in Table 1 and in Appendix B in which the 91 attitude questions are grouped into lifestyle subcategories (family, community, health, leisure, social, cultural, sleep, and finances) or job related subcategories (satisfaction, productivity, and stress). The subcategories represent a subjective organization of the items until a more thorough correlational grouping can be made. The data for these items (questions 1-91) are presented as percents

of those responding in each subcategory heading. The columns from left to right in Appendix B indicate the number responding (N), the percent increased or improved (\uparrow) , the percent not changed or the same (\longleftarrow) , the percent decreased or worsened (\downarrow) , and the percent indicating not applicable (NA) for each item.

Table 1. Perceived Impact of CWS

LIFESTYLE	FACTORS	30-DAY		6-MONTH	
	FAMILY		87%		85%
	COMMUNITY		87%	• • • • • • • •	84%
	HEALTH		89%		84%
	LEISURE		86%		83%
	SOCIAL		86%		84%
	CULTURAL		86%		85%
	SLEEP		75%		72%
	FINANCES	• • • • • • • • • • • • • • • • • • • •	89%	• • • • • • • • •	89%
JOB FACTO	ORS				
	SATISFACTION		90%		88%
	PRODUCTIVITY		92%		90%
	STRESS		84%		83%

Demographics data (Appendix C) were evaluated by anchoring each response with the response to question 119, which concerned preference for either the CWS or the SWS. In this way, a profile was obtained of those preferring the CWS and those not preferring the CWS. A χ^2 statistic was used to determine if significant relationships (p < 0.05) existed between demographic response and work schedule (CWS or SWS) preference. Those demographic items associated with statistically significant trends are described first.

The age of the respondent influenced preference for CWS (question 93 in Appendix C). Preference for CWS was indicated by 74% of the younger workers, 30 years old or less. However, this number was reduced to 66% of workers over 50 years old. These results are shown in Figure 1 which graphs preference for SWS compared to preference for CWS within each age group. Figure 1 shows that the majority at every age preferred CWS or 10-hour schedule. However, as age increases beyond 40 years, preference for SWS or 8-hour schedule increases while preference for CWS decreases.

Having adults at home who need care reduced the preference for CWS. Considering 4 categories of adults in the home (no extra adult, only 1 adult, only 2 adults, and 3 or more adults) revealed differences in preference for CWS. Of those families in which 3 or more extra adults needed care (question

101 in Appendix C), 66.3% of the respondents favored CWS (n=98), and for those with only 2 adults 65% favored CWS (n=212), a decrease from the 75.3% who favored it in the family having no extra adults (n=1043).

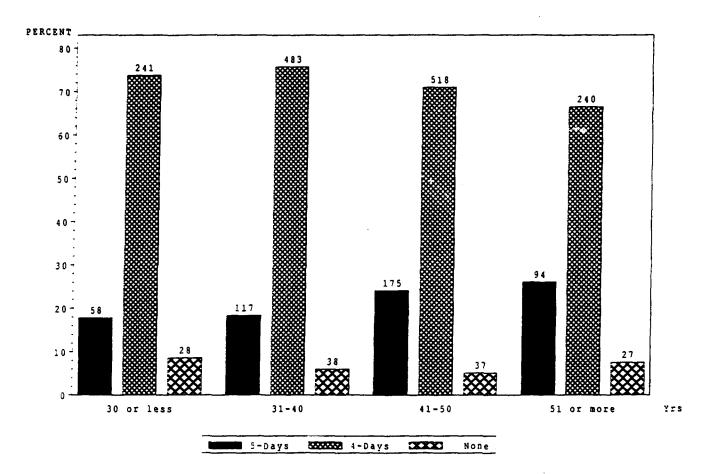


Figure 1. Work schedule preference by age (6 Month Results)

The potential for a schedule to produce chronic fatigue is an important consideration in the decision to implement CWS. Accordingly, a series of questions were designed to address this issue. Both the amount of sleep obtained and the subjective impressions of alertness were assessed. As Table 2 shows, the majority of people surveyed were getting the same amount of sleep on CWS as they did on SWS (n=1147). However, a substantial number reported getting less sleep on CWS (n=720). Examination of Table 2 shows that of those reporting less sleep on CWS, 43% prefer the 8-hour SWS schedule. The significance of this result cannot be determined after a 6-month CWS evaluation. Time to adjust to the new sleep schedules required of CWS must Thus, the impact of CWS on sleep must await the 1-year be considered. sample. Table 2 was derived from responses to questions 104 and 105 regarding the amount of sleep obtained on SWS after a typical workday compared to the amount obtained on CWS for the 6-month CWS and one can compare them to the 30-day results that are within parentheses.

Table 2. Change in Sleep Obtained after a Workday under the CWS Compared to the SWS. Results are organized by preference for work schedule. (SWS = 8-hour; CWS = 10-hour; NP = No Preference indicated; numbers in parentheses are from 30-day survey results.)

	SCH	EDULI	PRE	FEREN	CE		·	
	sws		CWS		NP		N	T
SLEEP COMPARISON								
LESS	43%	(34%)	49%	(55%)	9%	(10%)	720	(713)
SAME	10%	(9%)	85%	(85%)	5%	(6%)	1147	(1237)
MORE	15%	(16%)	80%	(81%)	5%	(4%)	191	(220)

Organizing work schedule preference by subjective rating of alertness at the beginning or ending of a workday approached the issue of schedule-induced fatigue from another perspective. Considering questions 110 and 111 regarding the degree of alertness at the end of the workday, Table 3 compares those preferring SWS to those favoring CWS. The same pattern emerged as in Table 2. The majority (n=1231) reported no change in alertness as a result of CWS. However, a large number (n=600) reported being less alert at the end of the day. Of those reporting less alertness, 59% preferred SWS. It is noteworthy that only 4% of those reporting feeling more alert and 6% reporting the same alertness level preferred SWS. Similar findings were obtained considering alertness at the beginning of a day (questions 108-109). Again, the 6-month CWS results can be compared with the 30-day CWS in parentheses.

In two related demographics in Appendix C, years employed in Federal service (question 96) and years employed at Kelly AFB (question 115), the results indicated similar preferences. Of those with 31 years or more of Federal service, 58.5% preferred the CWS compared to 79.5% of those with less than 5 years of Federal service. In response to question 115, years employed at Kelly AFB, 78.3% of those with less than 5 years preferred the CWS compared to 65% of those with 31 or more years.

Only a few people used public transportation to get to work under the CWS (n=29) as opposed to other forms of transportation. However, under CWS (question 118 in Appendix C), only 66% of those who used public transportation favored CWS while 77% of those who car pooled or 72% of those who drove preferred CWS. Public transportation may not be as available under CWS.

Table 3. Change in Alertness at the End of the Workday under the CWS Compared to the SWS. Results are organized by preference for work schedule. (SWS = 8-hour; CWS = 10-hour; NP = No Preference indicated; numbers in parentheses are from the 30-day survey results.)

	SCHI	EDULH	PRE	FEREN	CE			
	sws		cws		NP		N	<u> </u>
ALERTNESS	COMPARISON							
LESS	59%	(50%)	31%	(39%)	10% (11%)	600	(590)
SAME	6%	(6%)	88%	(87%)	2%	(7%)	1231	(1364)
MORE	4%	(3%)	94%	(96%)	2%	(1%)	227	(216)

A number of findings did not achieve statistical significance but may nonetheless be important. For example, educational background (question 94 in Appendix C) did not appear to influence the preference for the CWS. Likewise, Federal service grade level from WG 5 through GM 15 (question 95 in Appendix C) had no significant effect on work schedule preference. Yet, when one looks at the GM 13 - 15, we see their preference (63%) as the lowest of all grade levels. There was no preference for the work schedule on the basis of gender (question 92 in Appendix C). About as many males (72%) as females (71%) preferred CWS. There was no indication that singles (74%) were different from married respondents (72%) in their preference for CWS (question 97 in Appendix C). There was no tendency for job type (question 102 in Appendix C) to influence the overall preference for CWS. For example, preference for CWS was expressed by 74% of those identifying their job as secretarial and 74% of managers.

Finally, the organization to which the respondent belonged did make a difference in the overall preference for the CWS (question 103 in Appendix C). Table 4 shows each organization broken out by preference for SWS, CWS, or no preference (NP) with 6-month data, and the 30-day survey results in parentheses. For DS we see an increase after 6 months to 77% for CWS and a drop to 14% for SWS; for LA we see 74% for 6-month and 75% for 30-day CWS, no difference here. For LDA we see 81% for CWS preference, but for LDS, only 62% for CWS preference, indicating reorganization problems influenced their subjective feelings on this survey. TI also had a significant drop to 63% for 6-month CWS as compared to the 88% for 30-day CWS and the increase to 31% for 6-month SWS as compared to the 6% for 30-day SWS. Again we see the influence of reorganization and reshuffling of personnel in both LDS and TI organizations.

Table 4. Work Schedule Preference by Organization. (SWS = 8-hour; CWS = 10-hour; NP = No Preference indicated; numbers in parentheses refer to 30-day results.)

Organization	sws		cws		NP		N	
DS	14%	(20%)	77%	(71%)	9%	(9%)	96	(128)
LA	20%	(18%)	74%	(75%)	6%	(7%)	1283	(1333)
LDA*	14%		81%		5%		160	
LDS*	31%	(18%)	62%	(75%)	7%	(8%)	331	(626)
TI	31%	(6%)	63%	(88%)	6%	(6%)	111	(32)
OTHER	23%	(19%)	70%	(74%)	7%	(6%)	74	(31)

^{*}During the 30-day evaluation, the designation was LD.

CONCLUSIONS AND DISCUSSION

The results of this survey sample, based on 6 months of experience with CWS, indicated that over 78% of the workers surveyed either preferred CWS or had no preference. The responses for the majority of lifestyle or job related questions paralleled this overall result.

The characteristics that inclined a worker at Kelly AFB to report less favor with CWS are probably not inclusive. A demographic profile of this group would include workers with dependent adults in need of care at home, older workers, and those who take public transportation. The impact of CWS on those workers less satisfied by CWS may be lessened with more experience on the schedule. Management will have to find ways to reduce CWS negative lifestyle impact through education or special arrangements for those individuals reporting negative effects from CWS.

A few anecdotal comments, made to the investigators by the respondents, deserve mention. Several workers commented on inequities in overtime with CWS. For example, it was easier to get overtime if one worked Monday through Thursday than if one worked Tuesday through Friday, or they indicated that overtime now required working longer than 10 hours, often 12 hours in a day. In addition, meetings were sometimes scheduled on their day off abrogating the 4-day work week.

These 6-month CWS results show many of the improvements in employee morale found in other studies (14). In those studies productivity was increased by extending service hours or by better matching employee schedules to peak

workloads. There was also reduced absenteeism, tardiness, and turnover. With more leisure time, there were fewer days away from home, savings on commuter costs, more opportunities to spend time differently with different family members, and it was easier to schedule medical and other appointments. There were economic advantages due to CWS (e.g., moonlighting), and there was more time for leisure items such as boats, recreational vehicles, vacation homes, etc. There was increased attendance at entertainment facilities in communities, increased travel, and more available time for higher educational courses. One review study (14) concluded that workers favoring CWS also participated in more leisure activities. There is no question that some aspects of the quality of life are improved under CWS, increasing morale at work, satisfaction at home and at work, and resulting in social stability.

Of course, there are disadvantages. One of the key issues is fatigue with its effect on concentration, errors, quality of work, injuries, productivity, and the long-term health of valuable employees. Another disadvantage is scheduling problems, most often affecting CWS supervisors and key operational personnel (7). Poor (17) found that a greater proportion of women under 30 years old (assume many are single or do not have children) adjusted better than women over 30 years old. Some studies indicated that employees in CWS found it difficult to participate in a variety of community, social, or recreational activities that were previously accessible.

Reported disadvantages cited by employees (6) were fatigue from 10-hour workdays, causing poorer quality work, scheduling difficulties, overtime problems, reduced service to customers, increased moonlighting on the 5th and 6th days, increased job dissatisfaction, especially by older employees and mothers with young children. Also CWS does not create more jobs for the unemployed. For example, present CWS employees such as police and firefighters have the "highest moonlighting rate" of any workers other than teachers.

Glueck (6) predicted that CWS will become less used and flextime will be highly preferable, claiming that older employees find CWS physically and mentally taxing (1), single young people find CWS interferes with their social tives, women with younger children find it more difficult to keep up with child care and housekeeping. Glueck also stated that productivity is reduced due to fatigue, and that employees physically and/or mentally taxed are not working as efficiently at 6 p.m. as they did at 8:30 a.m. Also, human physiology dampens effectiveness as evidenced by "early morning people" who find it difficult to perform well on the 9th or 10th hours of the day. Glueck indicated that unions would use CWS as a bargaining point for lesser hours, like 4 days with 36 or 32 hours, thus reducing productivity.

Flextime schedules a normal 40 hours in 5 days with "core time" of midmorning through midafternoon (9 a.m. to 3 p.m.), discretionary time of arrival from 6 a.m. to 9 a.m. and departure time from 3 p.m. to 7 p.m. Also, some flextime allows employees to work certain core times each day, but does not require 8 hours per day as long as their weekly total is met. Glueck claims that the trend is away from CWS toward flexible systems (6). From

both Kelly AFB studies using 30-day (5) and 6-month CWS survey results, the trend among more than 75% of CWS employees is to maintain this CWS of 4-day, 10-hour work scheduling.

As workers become more familiar with the demands of the CWS and adapt their lifestyles to accommodate the schedule, job and employee satisfaction under the CWS could increase to levels above those presently seen. On the other hand, once the euphoria of "3-day weekends" begins to fade, workers may find more dissatisfaction with CWS due to presently unrealized stresses as found in a previous study (12). We therefore strongly recommend to continue polling those involved in the prototype for 2 to 3 years if SA-ALC/HRC plans to continue the CWS past the 1-year original plan.

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APPENDIX A The Kelly AFB Attitude Survey



The Kelly AFB Attitude Survey



Instructions

- 1. Answer each question on this survey using the green and er sheet and pencil(s) provided. If you wish to change an answer, erase completely your first response, and then mark the new response. Do not make any stray marks on the answer sheet.
- 2. DO NOT MARK YOUR NAME OR ANY OTHER IDENTIFYING INFORMATION ON EITHER THE ANSWER SHEET OR THE SURVEY BOOKLET.
- 3. Please follow carefully the instructions given to you by your survey administrator. There is no time limit for this survey but it should take at most 30 minutes.
- 4. When a question in this survey asks about your "old work schedule", it is referring to the original 5 days per week, 8 hours per day work schedule. When a question asks about your "new work schedule", it is referring to the trial, 4 days per week, 10 hours per day work schedule.
- 5. If you do not understand a question please ask your test administrator for clarification.

Please turn to the reverse side for the first questions.

Section A.

Instructions: For each of the activities described in questions 1-41, please complete the following sentence:

Compared to my old work schedule, I feel today that my new work schedule has allowed me:

- A. MORE TIME for this activity.
- B. SAME TIME for this activity.
- C. LESS TIME for this activity.
- D. DOES NOT APPLY to me.
- 1. doing chores around the house.
- 2. gardening.
- 3. doing errands.
- 4. grocery shopping.
- 5. caring for children.
- 6. spending time outdoors.
- 7. resting or relaxing.
- 8. moonlighting.
- 9. traveling.
- 10. studying.
- 11. socializing.
- 12. participating in cultural events.
- 13. watching T.V.
- 14. keeping personal appointments.
- 15. doing volunteer work.
- 16. watching sports.
- 17. participating in sports.
- 18. going to movies.
- 19. preparing meals.
- 20. dining out.
- 21. attending religious services.

- 22. working on hobbies.
- 23. being with friends.
- 24. being with spouse.
- 25. spending time with children.
- 26. training on the job.
- 27. helping in my community.
- 28. being with companions.
- 29. doing my job effectively.
- 30. going on vacation.
- 31. exercising.
- 32. spending time with parents.
- 33. dropping off/picking up children.
- 34. attending child school events.
- 35. participating in clubs/societies.
- 36. attending to personal appearance.
- 37. achieving job goals.
- 38. reaching family goals.
- 39. having fun.
- 40. recreation.
- 41. sleeping.

Please ensure your answer sheet marks correspond to the question number.

Please turn to the next page for more questions.

Section B.

Instructions: For each of the items described in questions 42-70, please complete the following sentence:

Compared to my old work schedule, I feel today that my new work schedule has:

- A. IMPROVED this part of my life.
- B. NOT CHANGED this part of my life.
- C. WORSENED this part of my life.
- D. DOES NOT APPLY to me.
- 42. commute to/from work.
- 43. marital life.
- 44. attitude at work.
- 45. attitude at home.
- 46. meals at home.
- 47. motivation on the job.
- 48. sleep.
- 49. family life.
- 50. job environment.
- 51. personal finances.
- 52. fellow workers' attitude.
- 53. supervisor's attitude.
- 54. rest breaks.
- 55. outlook on work.
- 56. outlook on life.

- 57. waking up.
- 58. spouse's attitude.
- 59. spouse's schedule.
- 60. spouse's happiness.
- 61. personal happiness.
- 62. health.
- 63. home life.
- 64. job skills.
- 65. economic outlook.
- 66. drive to/from work.
- 67. scheduling leave/vacation.
- 68. work output.
- 69. work conditions.
- 70. holiday enjoyment.

Please turn to the reverse side for more questions.

Section C.

Instructions: For each of the items described in questions 71-91 please complete the following sentence:

Compared to my old work schedule, I feel today that my new work schedule has:

- A. INCREASED this aspect of my life.
- B. NOT CHANGED this aspect of my life.
- C. DECREASED this aspect of my life.
- D. DOES NOT APPLY to me.

71.	stress at home.	82.	work punctuality.
72.	work tardiness.	83.	job complaints.
73.	job enrichment.	84.	happiness at work.
74.	job satisfaction.	85.	
<i>75.</i>	job productivity.	86.	job problems.
76.	job fatigue/stress.	87.	family problems.
<i>77</i> .	job efficiency.	88.	expenses.
	•	89.	work backlog.
79.	job load.	90.	clock watching.
80.	job strain.	91.	work output.

Section D.

Instructions: For each of the following questions, please select the response which best describes you:

92. What is your sex?

81. family pride.

- A. Male
- B. Female
- 93. What is your age?
 - A. 20 years or less
 - B. 21-30 years
 - C. 31-40 years
 - D. 41-50 years
 - E. 51 or more years

Please ensure your answer sheet marks correspond to the question number.

Please turn to the next page for more questions.

94.	Which one	category	best	describes	your e	ducati	ional	back	ground?
-----	-----------	----------	------	-----------	--------	--------	-------	------	---------

- A. some high school
- B. high school diploma or GED
- C. completed technical/vocational training
- D. completed Associates (2 yr) degree
- E. completed Bachelors (4 yr) degree
- F. completed graduate degree

95. What is your current Federal Service Grade?

Civil	ian	Military				
A.	WG 5-9	I.	E1 - E3			
B.	WG 10-14	J.	E4 - E6			
C.	WL 1-14	K.	E7 - E9			
D.	WS	L.	01 - 03			
E.	GS 1-6	M.	04 - 06			
F.	GS 7-15	N.	other			
G.	GM 13-15					
H.	other					

- 96. What are your years of federal service (including prior military)?
 - A. 0-5 years
 - B. 6-10 years
 - C. 11-20 years
 - D. 21-30 years
 - E. 31 or more years
- 97. What is your current marital status?
 - A. Single
 - B. Married
- 98. How many children under 18 years old depend on your care?
 - A. None
 - B. 1 child
 - C. 2 children
 - D. 3 or more children
- 99. How many adults 18 years or older other than yourself live in your home?
 - A. None
 - B. 1 adult
 - C. 2 adults
 - D. 3 or more adults

100.	How many adults 18 years or older other than yourself provide help in your home?							
	A.	None						
	B.	1 adult						
	C.	2 adults						
	D.	3 or more adults						
101.	How many adults 18 years or older depend on your care?							
•	A.	None						
	В.	1 adult						
	C.	2 adults						
	D.	3 or more adults						
102.	What	is your primary job description?						
	A.	Secretarial/Clerical						
	В.	Administrative						
	C.	Trade/Craft/Labor						
	D.	Technical						
	E.	Engineering/Scientific						
	F.	Managerial/Supervisory						
	G.	Other						
103.	What	is your assigned work center?						
	A.	DS						
	В.	LA						
	C.	LDA						
	D.	LDS						
	E.	TI						
	F.	other						
104. sched		many hours did you usually sleep after a typical work day on your old						
scheu	nie:							
	A.	5 or less hours						
	B.	6 hours						
	C.	7 hours						
	D.	8 hours .						
	E.	9 hours						
	F.	10 or more hours						
		Please turn to the next page for more questions.						

105.	How many hours do you usually sleep after a typical work day now?							
	A.	5 or less hours						
	B.	6 hours						
	C.	7 hours						
	D.	8 hours						
	E.	9 hours						
	F.	10 or more hours						
106.	How	many hours did you usually sleep after a typical day off on your old schedule?						
	A.	5 or less hours						
	В.	6 hours						
	C.	7 hours						
	D.	8 hours						
	E.	9 hours						
	F.	10 or more hours						
107.	How many hours do you usually sleep after a typical day or now?							
	A.	5 or less hours						
	В.	6 hours						
	C.	7 hours						
	D.	8 hours						
	E.	9 hours						
	F.	10 or more hours						
108.	How	did you usually feel at the start of your work day on your old schedule?						
	A.	alert						
	В.	a little tired						
	C.	very tired						
	D.	exhausted						
109.	How	do you usually feel at the start of your work day now?						
	Α.	alert						
	В.	a little tired						
	C.	very tired						
	D.	exhausted						
DI	A05A 4	ensure your answer sheet marks correspond to the question number.						
A 1	case t	moute Jour answer succemaring correspond to the decertor number						

Please turn to the reverse side for more questions.

110.H	low die	d you t	isually feel at the end of your work day on your old schedule?						
	A.	alert							
	B.	a lit	tle tired						
	C.	very	tired						
	D.	•	usted						
111.	How do you usually feel at the end of your work day now?								
	A.	alert							
	B.	a litt	tle tired						
	C.	very	tired						
	D.	exha	usted						
112.	Whic	h worl	k shift are you on now?						
	A.	First	t (Day)						
	В.	Seco	nd (Night)						
113.	How long have you lived in Texas?								
		A.	0-5 years						
		B. \	6-10 years						
		C.	11-20 years						
		D.	21-30 years						
		E.	31 or more years						
114.	Have you worked any official overtime on the new schedule in the last 2 months?								
		A.	yes						
		В.	no						
115.	How long have you been working at Kelly A.F.B.?								
		A.	0-5 years						
		В.	6-10 years						
		C.	11-20 years						
		D.	21-30 years						
		E.	31 or more years						
116.	Whic	Which entrance gate do you usually use?							
	A.	Nort	h (36th street)						
	B.	Main (Hudnell Drive)							
	C.	General McMullen							
	D.	South (Military Drive)							
	E.	othe							

- 117. How did you usually get to work on your old schedule?
 - A. mostly carpool
 - B. mostly drive myself
 - C. mostly use public transportation
- 118. How do you usually get to work now?
 - A. mostly car pool
 - B. mostly drive myself
 - C. mostly use public transportation
- 119. Overall, which work schedule do you prefer?
 - A. Strongly prefer the old work schedule
 - B. Prefer the old work schedule
 - C. Strongly prefer the new work schedule
 - D. Prefer the new work schedule
 - E. I have no preference
- 120. Which work schedule did you indicate you preferred on the previous survey (October, November, December, 1991)?.
 - A. Old work schedule
 - B. New work schedule
 - C. No Preference
 - D. I did not take the last survey

APPENDIX B

Responses to the Lifestyle and Job Related Questions (1-91) on the Survey (Sections A, B, and C) * indicates item shared one other sub-category Shown are the total number responding (N), the percent increased or improved (†), the percent not changed or the same (\rightarrow +), the percent decreased or worsened (\downarrow) and the percent not applicable (NA) for each item.

LIFESTYLE/SOCIAL FACTORS

		•	•		
FAMILY	N	% ተ	% → ←	\$ ↑	% NA
1 Doing chores around the house	2051	59	19	22	1
2 Gardening *	2047	37	21	18	23
3 Doing errands	2051	57	21	21	1
4 Grocery shopping	2051	40	37	15	9
5 Caring for children	2048	30	17	17	36
14 Keeping personal appointments	2051	51	28	18	3
19 Preparing meals	2049	20	39	21	21
20 Dining out *	2051	31	51	13	5
21 Attending religious service *	2051	18	58	10	13
24 Being with spouse	2049	35	29	17	19
25 Spending time with children	2046	34	25	17	25
32 Spending time with parents	2049	24	40	16	20
33 Dropping off/picking up children	2047	18	17	18	46
34 Attending child school events *	2046	19	23	17	40
38 Reaching family goals	2049	36	42	17	5
43 Marital life	2058	26	45	11	19
45 Attitude at home	2057	41	46	13	1
46 Meals at home	2058	20	60	19	2
49 Family life	2058	37	45	14	4
58 Spouse's attitude	2056	25	43	13	20
59 Spouse's schedule	2058	17	49	14	21
60 Spouse's happiness	2056	28	41	12	20
63 Home life	2058	38	49	13	1
	2056	56	33	10	
67 Scheduling leave/vacation * 71 Stress at home	2054	18	51	27	1
					4
81 Family pride	2055	28	62	6	5
85 Happiness at home	2057	41	47	11	2
87 Family problems	2055	10	61	20	9
COMMUNITY	N	% ↑	% →←	% ↓	% NA
11 Socializing *	2051	38	38	19	5
12 Participating in cultural events		27	34	17	22
15 Doing Volunteer work	2046	25	26	14	35
21 Attending religious service *	2051	18	58	10	13
27 Helping in my community	2050	22	38	16	24
34 Attending child school events *	2046	19	23	17	40
5. 11000.111.1g 0.1214 00.1001 0.0010	20.0				
HEALTH	N	% ተ	% →←	8 ↑	% NA
7 Resting or relaxing *	2047	47	28	23	2
31 Exercising	2049	29	42	22	7
36 Attending to personal appearance	2037	29	49	13	10
56 Outlook of life	2058	42	48	9	1
61 Personal happiness	2058	47	38	14	ī
62 Health	2058	26	61	12	ī
V	2000	20	~ _		-

LEISURE	N	% ተ	% →←	ફ ↓	% NA
2 Gardening *	2047	37	21	18	23
6 Spending time outdoors	2050	55	21	21	2
7 Resting or relaxing *	2047	47	28	23	2
9 Traveling *	2048	53	24	13	10
10 Studying	2050	26	27	17	30
13 Watching TV	2048	25	46	23	7
16 Watching sports *	2050	23	45	14	19
17 Participating in sports	2045	21	31	17	31
18 Going to movies *	2050	25	42	14	18
22 Working on hobbies	2049	43	30	20	7
30 Going on vacation	2050	53	34	9	4
39 Having fun	2051	51	29	18	2
40 Recreation	2049	49	29	19	2
70 Holiday enjoyment	2057	69	25	6	1
SOCIAL	N	% ↑	% → ←	β ↑	% NA
11 Socializing *	2051	38	38	19	5
16 Watching sports *	2050	23	45	14	19
18 Going to movies *	2050	25	42	14	18
20 Dining out *	2051	31	51	13	5
23 Being with friends *	2050	34	43	19	4
28 Being with companions	2049	31	45	18	7
35 Participating in clubs/societies	* 2048	18	33	16	33
CULTURAL	N	% ↑	% →←	8 t	% NA
9 Traveling *	2048	53	24	13	10
12 Participating in cultural events	* 2048	27	34	17	22
35 Participating in clubs/societies		18	33	16	33
SLEEP	N	% ↑	% →←	% ↓	% NA
7 Resting or relaxing *	2047	47	28	23	2
41 Sleeping	2050	26	42	30	2
48 Sleep	2057	20	50	29	1
57 Waking up	2056	16	55	28	ī
78 Tiredness	2057	29	49	19	3
FINANCES	N	% †	% →←	ક ↓	% NA
8 Moonlighting	N 2049	15	13	3 + 14	5 NA 58
51 Personal finances	2049	28	61	9	2
65 Economic outlook	2057	28 28	62	8	1
	2057	12	68	17	3
88 Expenses	2006	12	96	7/	J

JOB RELATED FACTORS

SATISFACTION .	N	% †	ફ →←	8 t	% NA
26 Training on the job *	2046	26	47	9	18
37 Achieving job goals *	2049	40	46	10	3
42 Commute to/from work	2053	33	51	13	2
44 Attitude at work	2058	43	44	13	0
47 Motivation on the job *	2058	43	43	13	1
50 Job environment *	2058	33	55	11	1
52 Fellow workers' attitude *	2056	32	53	14	1
53 Supervisor's attitude *	2057	24	58	15	3
54 Rest breaks *	2058	16	67	15	1
55 Outlook on work	2058	41	47	11	0
66 Drive to/from work	2056	33	53	13	1
67 Scheduling leave/vacation *	2056	56	33	10	1
69 Work conditions *	2057	31	59	9	1
72 Work tardiness *	2056	13	57	17	13
73 Job enrichment	2058	32	58	9	1
74 Job satisfaction	2058	38	52	10	1
83 Job complaints	2057	13	62	19	6
84 Happiness at work	2055	35	50	14	2
86 Job problems *	2055	11	66	18	4
80 000 probrems					
PRODUCTIVITY	N	% ↑	ફ →←	8 t	% NA
26 Training on the job *	2046	26	47	9	18
29 Doing my job effectively	2050	49	40	9	2
37 Achieving job goals *	2049	40	46	10	3
47 Motivation on the job *	2058	43	43	13	1
50 Job environment *	2058	33	55	11	1
64 Job skills	2057	32	61	6	1
68 Work output	2058	47	44	8	0
72 Work tardiness *	2056	13	57	17	13
75 Job productivity	2057	45	45	9	1
77 Job efficiency	2058	40	49	9	1
82 Work punctuality	2054	25	64	9	2
86 Job problems *	2055	11	66	18	4
89 Work backlog	2056	11	63	21	4
90 Clock watching	2056	17	50	19	13
91 Work output	2057	42	49	8	1
STRESS	N	% ተ	ફ →←	8 ↑	% NA
52 Fellow workers' attitude *	2056	32	53	14	1
53 Supervisor's attitude *	2057	24	58	15	3
54 Rest breaks *	2058				
	2057	31	59		
= - · · · · ·	2056	26			
	2058	17	72		
	2056	19	62	16	2
	2058 2057 2056 2058	16 31 26 17	67 59 47 72	15 9 25 10 16	1 1 3 2 2

APPENDIX C

Demographic Data for Survey Section D (Questions 92 to 120) for all Organizations

Q92(Sex) and Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
Male %	368 21.60	1229 72.12	107 6.28	1704
Female	77 21.75	253 71.47	24 6.78	354
Total	-+ 445	1482	131	2058

Statistic	DF	Value	Prob
Chi-Square	2		0.934

Q93(Age) and Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
30 yrs or less	58 17.74	241 73.70	28 8.56	327
31-40 yrs %	117 18.34	483 75.71	38 5.96	638
41-50 yrs	175 23.97	518 70.96	37 5.07	730
51 yrs or more	94 26.04	240 66.48	27 7.48	361
Total 444 1482 130 Frequency Missing = 2				
Statistic	DF	Value	Pı	rob
Chi-Square	6	18.888	0.0	004

Q94(Educational background) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
Some high school	16 27.59	37 63.79	5 8.62	58
HS diploma/GED	124 19.11	481 74.11	44 6.78	649
Technical/ vocational - %	115 22.20	372 71.81	31 5.98	518
Associates degree	116 22.70	367 71.82	28 5.48	511
Bachelors degree	59 24.18	167 68.44	18 7.38	244
Graduate degree	12 20.34	44 74.58	3 5.08	59
Total Frequency Missing	442 = 19	1468	129	2039
Statistic	DF	Value	Pı	rob
Chi-Square	10	7.351	0.6	592

Q95(Federal Service Grade?) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total	
WG 5-9	66 15.14	341 78.21	29 6.65	436	
WG 10-14	193 24.13	551 68.88	56 7.00	800	
WL 1-14 %	12 19.67	44 72.13	5 8.20	61	
WS %	17 25.00	47 69.12	4 5.88	68	
GS 1-6	26 20.47	96 75.59	5 3.94	127	
GS 7-13	120 22.73	377 71.40	31 5.87	528	
GM 13-15	9 37.50	15 62.50	0.00	24	
Other CIV	2 14.29	11 78.57	1 7.14	14	
Total	445	1482	131	2058	
Statistic	DF	Value	Pr	ob .	
Chi-Square	14	22.751	0.0	64	

WARNING: 21% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Q96(Years of federal service) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
0-5 yrs %	25 14.62	136 79.53	10 5.85	171
6-10 yrs	130 20.00	478 73.54	42 6.46	650
11-20 yrs	137 21.57	456 71.81	42 6.61	635
21-30 yrs	115 24.01	340 70.98	24 5.01	479
31 yrs or more	38 30.89	72 58.54	13 10.57	123
Total	445	1482	131	2058
Statistic	DF	Value	Pı	rob
Chi-Square	8	20.489	0.0	009

Q97(Marital status?) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total	
Single %	98 19.22	375 73.53	37 7.25	510	
Married %	347 22.42	1107 71.51	94 6.07	1548	
Total	445	1482	131	2058	
Statistic	DF	Value	Pı	rob	
Chi-Square	2	2.877	0.2	237	

Q98 (Children under 18 depend on you) & Q119 (Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
None %	165 19.60	620 73.63	57 6.77	842
1	118 25.05	329 69.85	24 5.10	471
2	102 23.78	293 68.30	34 7.93	429
3 or more	60 19.23	236 75.64	16 5.13	312
Total Frequency	445 Missing =	1478	131	2054
Statistic	DF	Value	Pı	cob
Chi-Square	6	11.693	0.0	069

Q99(# Adults living in your home?) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total	
None %	89 19.56	331 72.75	35 7.69	455	
1	215 21.92	711 72.48	55 5.61	981	
2	87 21.91	284 71.54	26 6.55	397	
3 or more	54 24.00	156 69.33	15 6.67	225	
Total	445	1482	131	2058	
Statistic	DF	Value	Pı	cob	_
Chi-Square	6	4.037	0.6	572	_

Q100(# Adults provide help in home?) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total	
None	165 21.24	558 71.81	54 6.95	777	
1	219 21.79	725 72.14	61 6.07	1005	
2	43 20.77	154 74.40	10 4.83	207	
3 or more	18 26.87	43 64.18	6 8.96	67	
Total Frequency l	445 Missing =	1480 2	131	2056	
Statistic	DF	Value	Pı	Prob	
Chi-Square	6	3.752	0.7	0.71	

Q101(# Adults depend on your care?) & Q119(Which work schedule do you prefer?)

Row Pct

	5-Day	4-Day	 	Total	
None	197 18.89	785 75.26	61 5.85	1043	
1	166 23.68	491 70.04	44 6.28	701	
2	57 26.89	138 65.09	17 8.02	212	
3 or more	24 24.49	65 66.33	9 9.18	98	
Total Frequency l	444 fissing =	1479 4	131	2054	
Statistic	DF	Value	e I	Prob	
Chi-Square	6	14.405	5 0.	0.025	

|Prefer | Prefer | No Pref. |

Q102(Job description) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
Secretary/Clerk	21 21.00	74 74.00	5 5.00	100
Administrator	23 20.54	84 75.00	5 4.46	112
Trade/Craft/Labor	188 19.85	703 74.23	56 5.91	947
Technical	127 25.66	332 67.07	36 7.27	495
Engineer/Scientist	30 26.09	78 67.83	7 6.09	115
Manager/Supervisor	38 19.49	145 74.36	12 6.15	195
Other %	14 15.91	64 72.73	10 11.36	88
Total Frequency Missing = 6	441	1480	131	2052
Statistic	DF	Value	Pı	rob
Chi-Square	12	16.296	0.1	L78

Q103 (Work center) & Q119 (Which work schedule do you prefer?)

Row Pot	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
DS %	13 13.54	74 77.08	9 9.38	96
LA %	254 19.80	951 74.12	78 6.08	1283
LDA %	23 14.38	129 80.63	8 5.00	160
LDS	103 31.12	204 61.63	24 7.25	331
TI %	34 30.63	70 63.06	7 6.31	111
Other	17 22.97	52 70.27	5 6.76	74
Total Frequency	444 Missing :	1480 = 3	131	2055
Statistic	DF	Value	Pı	cob

38.237

0.000

Chi-Square 10

Q104(Hrs sleep after workday(old schedule)) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
5 hrs or less	48 19.43	180 72.87	19 7.69	247
6 hrs	94 13.35	577 81.96	33 4.69	704
7 hrs	169 24.64	470 68.51	47 6.85	686
8 hrs	117 32.14	220 60.44	27 7.42	364
9 hrs	11 28.21	25 64.10	3 7.69	39
10 hrs or more	5 31.25	10 62.50	1 6.25	16
Total Frequency Missin	444 ng = 2	1482	130	2056
Statistic	DF	Value	Pı	cob
Chi-Square	10	68.829	0.0	000

Q105(Hrs sleep after workday(new schedule)) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
5 hrs or less	221 42.66	255 49.23	42 8.11	518
6 hrs	133 16.69	614 77.04	50 6.27	797
7 hrs	55 11.34	405 83.51	25 5.15	485
8 hrs	26 11.93	180 82.57	12 5.50	218
9 hrs	7 24.14	20 68.97	2 6.90	29
10 hrs or more	2 22.22	7 77.78	0.00	9
Total	444	1481	131	2056

Frequency Missing = 2

Statistic	DF	Value	Prob
Chi-Square	10	205.415	0.000

Q106(Hrs sleep after day off(old schedule)) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
5 hrs or less	33 19.88	119 71.69	14 8.43	166
6 hrs	54 13.64	323 81.57	19 4.80	396
7 hrs	128 22.22	419 72.74	29 5.03	576
8 hrs	172 24.54	478 68.19	51 7.28	701
9 hrs	41 26.62	102 66.23	11 7.14	154
10 hrs or more	15 23 81	41 65.08	7 11.11	63
Total Frequency Missin	443 ng = 2	1482	131	2056
Statistic	DF	Value	Pi	cop
Chi-Square	10	31.875	0.0	000

Q107(Hrs sleep after day off(new schedule)) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
5 hrs or less	74 36.82	112 55.72	15 7.46	201
6 hrs	80 20.20	290 73.23	26 6.57	396
7 hrs	77 16.38	377 80.21	16 3.40	470
8 hrs	97 15.59	481 77.33	44 7.07	622
9 hrs	57 26.89	139 65.57	16 7.55	212
10 hrs or more	58 37.91	81 52.94	14 9.15	153
Total Frequency Missis	443 ng = 4	1480	131	2054
Statistic	DF	Value	Pr	cob
Chi-Square	10	92.820	0.0	000

Q108 (How feel beginning workday (old schedule)) & Q119 (Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total	
Alert	336 27.84	792 65.62	79 6.55	1207	
Little tired	99 13.13	609 80.77	46 6.10	754	
Very tired	7 11.67	50 83.33	3 5.00	60	
Exhausted %	8.11	31 83.78	8.11	37	
Total	445	1482	131	2058	
Statistic	DF	Value	Pı	cob	
Chi-Square	6	69.748	0.0	000	

Q109(How feel beginning workday(new schedule)) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
Alert	50 4.92	923 90.76	44 4.33	1017
Little tired	196 25.13	513 65.77	71 9.10	780
Very tired	142 75.53	34 18.09	12 6.38	188
Exhausted %	57 78.08	12 16.44	4 5.48	73
Total	445	1482	131	2058
Statistic	DF	Value	Pı	cob
Chi-Square	6	672.988	0.0	000

Q110(How feel at end of workday(old schedule)) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
Alert	93 24.28	271 70.76	19 4.96	383
Little tired	315 22.68	973 70.05	101 7.27	1389
Very tired	32 14.35	183 82.06	8 3.59	223
Exhausted %	5 8.06	54 87.10	3 4.84	62
Total Frequency Miss	445 sing = 1	1481	131	2057
Statistic	DF	Value	Pı	rob
Chi-Square	6	24.508	0.0	000

Q111(How feel at end of workday(new schedule)) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
Alert %	12 3.75	302 94.38	6 1.88	320
Little tired	80 7.16	966 86.48	71 6.36	1117
Very tired	220 49.44	183 41.12	42 9.44	445
Exhausted %	132 75.86	30 17.24	12 6.90	174
Total Frequency Mis	444 sing = 2	1481	131	2056
Statistic	DF	Valu	e i	Prob
Chi-Square	6	754.84	9 0	.000

Q112(Work shift) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
First(DAY)	406 21.16	1391 72.49	122 6.36	1919
Second (NIGHT)	39 28.06	91 65.47	9 6.47	139
Total	445	1482	131	2058
Statistic	DF	Value	Pi	rob
Chi-Square	2	3.744	0.:	154

Q113(Years living in Texas) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
0-5 yrs	7 22.58	22 70.97	2 6.45	31
6-10 yrs	24 26.09	64 69.57	4 4.35	92
11-20 yrs	44 23.53	134 71.66	9 4.81	187
21-30 yrs	88 20.18	317 72.71	31 7.11	436
31 or more	282 21.53	943 71.98	85 6.49	1310
Total Frequency M	445 issing = 3	1480 2	131	2056
Statistic	DF	Value	Pı	rob
Chi-Square	8	3.416	0.9	906

Q114 (Worked official overtime last 2 months?) & Q119 (Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
Yes %	263 20.74	925 72.95	80 6.31	1268
No %	182 23.04	557 70.51	51 6.46	790
Total	445	1482	131	2058
Statistic	DF	Value	Pı	rob
Chi-Square	e 2	1.607	0.4	148

Q115(Years working at Kelly AFB) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total	
0-5 yrs %	39 13.88	220 78.29	22 7.83	281	
6-10 yrs	153 20.90	533 72.81	46 6.28	732	
11-20 yrs	129 22.47	409 71.25	36 6.27	574	
21-30 yrs	97 25.19	265 68.83	23 5.97	385	
31 or more	26 30.59	55 64.71	4 4.71	85	
Total Frequency M	444 issing = 1	1482 1	131	2057	
Statistic	DF	Value	Pı	cob	
Chi-Square	8	17.856	0.0)22	_

Q116(Entrance gate) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
North(36th St)	121 22.32	387 71.40	34 6.27	542
Main(Hudnell)	195 22.44	620 71.35	54 6.21	869
Gen. McMullen	62 19.94	227 72.99	22 7.07	311
South(Mil. Dr)	61 19.49	234 74.76	18 5.75	313
Other	5 31.25	10 62.50	1 6.25	16
Total Frequency Missin	444 ng = 7	1478	129	2051
Statistic	DF	Value	Pı	cob
Chi-Square	8	3.251	0.9	18

Q117(How did you get to work (old schedule)?) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
Carpool	55 27.09	143 70.44	5 2.46	203
Drive	378 20.91	1311 72.51	119 6.58	1808
Public trans	12 25.53	28 59.57	7 14.89	47
Total	445	1482	131	2058
Statistic	DF	Value	Pi	rob
Chi-Square	4	15.072	0.0	005

Q118 (How did you get to work (new schedule)?) & Q119 (Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
Carpool	39 20.42	147 76.96	5 2.62	191
Drive	401 21.82	1316 71.60	121 6.58	1838
Public trans	5 17.24	19 65.52	5 17.24	29
Total	445	1482	131	2058
Statistic	DF	Value	P1	cob
Chi-Square	4	11.021	0.0	026

Q98 BY Q119 CONTROLLING FOR Q97=Single Q98 (Children under 18 depend on you) & Q119 (Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total
None	61 18.37	248 74.70	23 6.93	332
1	17 18.28	69 74.19	7 7.53	93
2	17 31.48	33 61.11	4 7.41	54
3 or more	3 9.68	25 80.65	3 9.68	31
Total	98	375	37	510
Statistic	DF	Value	P1	rob
Chi-Square	6	7.585	0.2	270

Q98 BY Q119 CONTROLLING FOR Q97=Married Q98(Children under 18 depend on you) & Q119(Which work schedule do you prefer?)

Row Pct	Prefer 5-Day	Prefer 4-Day	No Pref.	Total	
None	104 20.39	372 72.94	34 6.67	510	
1	101 26.72	260 68.78	17 4.50	378	
2	85 22.67	260 69.33	30 8.00	375	
3 or more	57 20.28	211 75.09	13 4.63	281	
Total Frequency	347 Missing =	1103	94	1544	
Statistic	DF	Value	Pı	:ob	
Chi-Square	6	11.001	0.0	88	

Q120(Which work schedule prefer 6 mo. ago?) & Q119(Which work schedule do you prefer now?)

Frequency
Percent
Row Percent
Column Percent

	Prefer 5-Day now	Prefer 4-Day now	No Pref.	Total
Preferred 5-day	253 12.29 79.56 56.85	51 2.48 16.04 3.44	14 0.68 4.40 10.69	318 15.45
Preferred 4-day % % %	133 6.46 9.22 29.89	1259 61.18 87.25 84.95	51 2.48 3.53 38.93	1443 70.12
No Preference	27 1.31 23.89 6.07	37 1.80 32.74 2.50	49 2.38 43.36 37.40	113 5.49
Did not take	32 1.55 17.39 7.19	135 6.56 73.37 9.11	17 0.83 9.24 12.98	184 8.94
Total	445 21.62	1482 72.01	131 6.37	2058 100.00